

# Analysis Report

Report No.: 14080673HKG-001

The Equipment Under Test (EUT) is a transmitter for a RC car, which is operating at 2478MHz. It is powered by a 9V alkaline battery. The EUT consists of five sound buttons and two directional keys. After switching ON the EUT and the corresponding car (Receiver), When you press the sound buttons, the corresponding receiver will send out different sounds and if you activating the directional keys on the EUT, you can control the car moving forward, backward, left and right.

**Antenna Type: Internal antenna**

**Antenna Gain: 0dBi**

**Nominal rated field strength: 95.0 dB $\mu$ V/m at 3m**

**Maximum allowed field strength of production tolerance: +/- 3dB**

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 98.0dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.893mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain  
So;

Conducted Power = 1.893mW.

The SAR Exclusion Threshold Level:

=  $3.0 \cdot (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

=  $3.0 \cdot 5 / \text{sqrt}(2.478) \text{ mW}$

= 9.02mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.